

CLAIMS:

1. Decoding apparatus for the recovery of encoded data, the apparatus comprising an analogue-to-digital converter for receiving an analogue input signal and converting it into a digital signal, a detector for producing sequences of data representative of said analogue signal, and a decoder arranged to output data indicating that a sequence includes an error, an event detector for (a) detecting an event for altering or destroying said analogue input signal, and supplying an input to said detector one or more event signals indicating the occurrence of such an event, in response to which said detector is arranged to output one or more invalid sequences of data, the decoder being arranged to output a data stream representing said analogue input signal and including, in response to the event detector detecting the occurrence of an event, data corresponding to the or each sequence resulting from said altered or destroyed analogue input signal indicating that said sequence is incorrect.
2. Apparatus according to claim 1, wherein the event detector is coupled or connected to the detector for producing a sequence of data representative of the analogue signal, or to the decoder.
3. Apparatus according to claim 1, wherein the detector is a Viterbi detector and the decoder is an RLL decoder for decoding the sequence of data and producing n-bit code words which are arranged to be derived together with data indicating whether or not each said code word is correct.
4. Apparatus according to claim 3, wherein said decoder is arranged to respond to said event detector detecting an event for substantially altering or destroying said analogue input signal by generating one or more code words representative of said altered or destroyed input signal, together with data indicating that said one or more code words are incorrect.
5. Apparatus according to claim 4, wherein the event detector is coupled or connected to said detector, said detector being arranged to respond to said event detector detecting an event for substantially altering or destroying said

analogue input signal by generating an invalid encoded sequence of data, so the decoder is arranged to output code words including data indicating that said code words are incorrect representations of the duration of the event.

6. Apparatus according to claim 4, wherein said event detector is coupled or connected to said decoder, said decoder being arranged to respond to said event detector detecting an event for substantially altering or destroying said analogue input signal by outputting code words representative of said analogue input signal together with data indicating that said code words are incorrect.
7. Apparatus according to claim 1, wherein the event detector is a thermal asperity detector.
8. Apparatus according to claim 1, wherein said event detector is connected or coupled to the detector or the decoder by a shift or delay circuit.
9. Apparatus according to claim 1, in combination with a transducer head for a magnetic record.
10. A method of recovering encoded data, comprising the steps of receiving an analogue input signal and converting it into a digital signal, producing sequences of data representative of said analogue signal, and decoding said sequence of data and outputting it together with data indicating whether or not a sequence includes an error, monitoring said input signal and detecting an event which substantially alters or destroys said analogue input signal, producing one or more event signals indicating the occurrence of such an event, in response to which one or more invalid sequences of data are produced, and deriving on a single communication path a data stream representing said analogue input signal and including data corresponding to the or each sequence resulting from said altered or destroyed analogue input signal indicating that said sequence is incorrect.

11. Decoding apparatus for the recovery of encoded data, the apparatus comprising an analogue-to-digital converter for receiving an analogue input signal and converting it into a digital signal, a detector for producing sequences of data representative of said analogue signal, and a decoder arranged to output data indicating that a sequence includes an error, comprising an event detector for detecting an event for substantially altering or destroying said analogue input signal, the event detector being coupled or connected to said detector and arranged to provide as an input the detector one or more event signals for the duration of a detected event, the detector being arranged to respond to receipt of said one or more event signals by outputting an invalid encoded sequence of data, for causing the decoder to output code words including data indicating that said code words are incorrect representative of the duration of the event.
12. Apparatus according to claim 11, in combination with a transducer head for a magnetic record.
13. Decoding apparatus for the recovery of encoded data, the apparatus comprising an analogue-to-digital converter for receiving an analogue input signal and converting it into a digital signal, a detector for producing sequences of data representative of said analogue signal, a decoder arranged to output data indicating that a sequence includes an error, an event detector for detecting an event for substantially altering or destroying said analogue input signal, said event detector being coupled or connected to said decoder, and arranged to provide as an input to said detector one or more event signals indicating the occurrence of an event for substantially altering or destroying said analogue input signal, said decoder being arranged to be responsive to said one or more event signals to output code words representative of said analogue input signal together with data indicating that said code words are incorrect.